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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/684,409 | 10/15/2003 | Dae-Won Kim | 253/039 | 4381 |
| 7590 | 08/23/2005 | | | |
| LEE & STERBA, P.C. Suite 2000 1101 Wilson Boulevard Arlington, VA 22209 | | | | EXAMINER PHAM, MINH CHAU THI |
| | | | | ART UNIT 1724 |
| | | | | PAPER NUMBER |

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|-------------------------------|---------------------|
| | 10/684,409 | KIM ET AL. |
| Examiner | Art Unit Minh-Chau T. Pham | 1724 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 22 April 2005.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date .

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Japanese reference (JP 2164412), in view of Lurie (2,877,863).

The Japanese reference discloses a filter protection apparatus comprising a frame (1) having a shape of a filter securing part for securing an air filter (50), an attaching part for attaching the frame to the filter securing part (2a, 2b, 48), and a protection part (52, 54) which is coupled on the inner surface of the frame to occupy the inner space with a plurality of minute holes through which air passes for protecting the filter (50) from damage. The Japanese reference further discloses the protection part formed on Aluminum (see Abstract), and the filter protection net (52, 54) having a plurality of holes through which filtered air passes (see Fig. 3). Claims 1, 2, 15 and 17-20 differ from the disclosure of the Japanese reference in that the protection part being spaced a predetermined distance away from the filter. Lurie discloses protection part (18) being spaced a predetermined distance away from the filter (14) (see details of Fig. 5, col. 2, lines 4-19). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a protection part spaced away from the filter medium as taught by Lurie in the filter apparatus of the Japanese reference in order to effectively protect the filter from damage.

Claims 3-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Japanese reference (JP 2164412), in view of Lurie (2,877,863), as applied supra, and further in view of Northcut (6,554,880 B1).

Claims 3-14 and 16 call for a moving member disposed on the frame and the attaching part is coupled to the moving member to cause the attaching part to move together with the moving member. Northcut discloses a moving member (50, 10) mounted on the frame in engagement with the elongated channels (2) (see details of Fig. 3 and col. 4, lines 1-12), and persons of ordinary skill in the art will understand that the relative size and number of moving members can be any of a wide selection, and the size and position of other components may vary depending on the particular application and range of used desired (col. 4, lines 52-58). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a moving member as taught by Northcut in the filter apparatus of the Japanese reference and Lurie in order to necessitate more frequent rearrangement of the filter cells to achieve optimal filtration while maintaining easy to install and replace a filter.

Response to Amendment

Applicant's arguments filed on April 22, 2005 have been fully considered but they are not persuasive.

Applicant argue that none of the cited prior arts discloses the limitation "the protection part being spaced a predetermined distance away from the filter to protect the filter from damage" as amended. The Examiner maintains the Japanese reference as the primary reference and newly introduces Lurie as the secondary reference in combination with

the primary Japanese reference in the 103 rejections to show the protection part (18) being spaced a predetermined distance away from the filter (14) (see details of Fig. 5, col. 2, lines 4-19), as claimed. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a protection part spaced away from the filter medium as taught by Lurie in the filter apparatus of the Japanese reference in order to effectively protect the filter from damage.

Applicant's arguments with respect to claims 1-20 have been thoroughly considered but are moot in view of the new ground(s) of rejection, as discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Minh-Chau Pham
Patent Examiner
Art Unit: 1724
August 19, 2005